

**IN THE SPECIFICATION:**

Please delete the Sequence Listing at the end of the instant specification and enter the attached Sequence Listing in accordance with 37 C.F.R. § 1.821.

**IN THE CLAIMS:**

Cancel claims 1-24 without prejudice or disclaimer.

Please add new claims 25-43 as shown in the attached CLEAN COPY OF THE NEW CLAIMS.

**REMARKS**

Applicants respectfully request reconsideration of this application, and reconsideration of the Office Action dated September 20, 2002 (Paper No. 11). Upon entry of this Amendment, new claims 25-43 will be pending in this application. The newly added claims are supported by the specification and original claims. No new matter is incorporated by this Amendment. In addition, the requisite fee to pay for the extra independent claim is also attached hereto.

As an initial matter, upon review of the Sequence Listing, Applicants noticed an error that was created when the sequences were entered into the PatentIn program for generating the Sequence Listing for filing with the U.S. PTO. The start codon in SEQ ID NO: 1 was erroneously interpreted by the PatentIn program as encoding a Leucine. This is because the codon comprises the nucleotides -TTG-. Applicants submit that the start codon actually encodes methionine. This is supported by the priority document which has been incorporated by reference. Accordingly, Applicants submit herewith a corrected Sequence Listing and computer readable copy.

To further clarify the issue, Applicants provide the following explanation. The start codon consists of three nucleotides marking the start of translation. The start codon

encodes the first amino acid of the synthesized protein. The methionine encoding codon (ATG) is the universal codon which is used by more than 90% of all genes in the prokaryotes and eukaryotes. For approximately 8% of the genes the start codon comprises GTG, and for a few other genes (including the gene that is the subject matter of the present invention) the start codon comprises TTG. Although the codons GTG and TTG typically encode amino acids that are different from methionine when they are located inside the protein, all three start codons encode methionine when they are located at the first position of the protein. Applicants submit herewith pages from a textbook (Biotechnologie und Gentechnik, Thieme Verlage, pp. 320 and 749; see highlighted sections) which corroborate Applicants' above explanation. Applicants also submit herewith a translation of the highlighted sections.

Applicants submit that the corrected sequence listing does not introduce new matter. Hence, entry of the corrected Sequence Listing into the present specification is respectfully requested.

\* \* \* \* \*

The Office Action asserts that the title of the invention is not descriptive and thus requires a new title. In response, Applicants have amended the Title as suggested by the Examiner.

\* \* \*

Claims 7, 10, 12, 23, and 24 are objected to because of informalities. The previous claims have been cancelled by this Amendment thereby rendering this objection moot. Moreover, the newly added claims do not recite the informalities indicated in the Office Action. Accordingly, withdrawal of the objection is respectfully requested.

\* \* \*

Claims 1-12, 23, and 24 are rejected under 35 U.S.C. § 112, second paragraph, as purportedly being indefinite. Applicants point out that the original claims have been

cancelled. However, insofar as this rejection may be deemed applicable to the newly added claims, Applicants respectfully traverse.

In preparing this Amendment, Applicants have carefully reviewed the claims, taking into consideration the various issues raised by the Examiner in the Office Action. In general, the newly added claims have been prepared in a manner to address the Examiner's concerns regarding clarity as set forth in the Office Action. In particular, the newly added claims no longer recite the terms and phrases deemed indefinite by the Examiner.

Reconsideration and withdrawal of this rejection are respectfully requested.

\* \* \*

Claims 1-5, 7-11, 23, and 24 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is purportedly not adequately described by the specification. Applicants point out that the original claims have been cancelled. However, insofar as this rejection may be deemed applicable to the newly added claims, Applicants' respectfully traverse.

The Office Action asserts that the original claims encompassed a large and variable genus of polynucleotide sequences that are not adequately described.

As an initial matter, Applicants point out that the specification is not required to teach that which is known to those of skill in the art. The specification describes the isolation of the fadD15 gene and discloses the corresponding nucleotide sequence. The specification further teaches that the fadD15 gene encodes an acyl-CoA synthase and discloses the corresponding amino acid sequence of the acyl-CoA synthase. The specification also teaches that microorganisms wherein the fadD15 gene is overexpressed are useful in methods for producing L-amino acids, such as L-glutamate. See Pages 8-9. Furthermore, the specification at pages 10-20 and in the Examples describe in detail how to produce the claimed invention and lists numerous well known journal articles to which

those of skill in the art can turn for additional instruction. Applicants point out that the information in the cited journal articles is well known to those of skill in the art and incorporated into the specification by reference. Thus, the newly added claims are adequately described by the specification.

The newly added claims define an isolated polynucleotide (or a bacteria including the isolated polynucleotide) comprising SEQ ID NO: 1 or which encodes an acyl-CoA synthase including the amino acid sequence of SEQ ID NO: 2. Thus, the newly added claims do not define functionally unrelated polynucleotides or proteins and fully comply with 35 U.S.C. 112.

The newly added claims and above Remarks overcome this rejection. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

\* \* \*

Claims 1-5, 7-11, 23, and 24 are rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter that is purportedly not fully enabled by the specification. Applicants point out that original claims 1-5, 7-11, 23, and 24 have been cancelled. However, insofar as this rejection may be deemed applicable to the newly added claims, Applicants' respectfully traverse.

The Office Action asserts that the specification is enabling for a polynucleotide encoding the polypeptide of SEQ ID NO: 2, the polynucleotide of SEQ ID NO: 1, and a bacterium transformed with an expression vector comprising SEQ ID NO: 1.

As stated above, the newly added claims relate to isolated polynucleotides (or a bacteria including the isolated polynucleotide) comprising SEQ ID NO: 1 or which encode an acyl-CoA synthase including the amino acid sequence of SEQ ID NO: 2. Accordingly, the claims are not so broad as to encompass "any genetically modified coryneform bacteria, polynucleotide, primers and hybridization probes." Applicants submit that the specification fully enables the subject matter of the newly added claims. Furthermore,

those of skill would be able to practice the claimed invention without undue experimentation. The specification describes in detail how to produce the claimed invention. Thus, the newly added claims fully comply with 35 U.S.C. 112.

The newly added claims and above Remarks overcome this rejection. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

\* \* \* \* \*

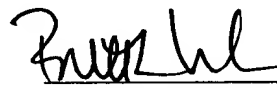
Applicants respectfully submit that this Amendment and the above remarks obviate the outstanding rejections in this case, thereby placing the application in condition for immediate allowance. Allowance of this application is earnestly solicited.

If any fees under 37 C.F.R. §§ 1.16 or 1.17 are due in connection with this filing, please charge the fees to Deposit Account No. 02-4300; Order No. 032301.1181.

If an extension of time under 37 C.F.R. § 1.136 is necessary that is not accounted for in the papers filed herewith, such an extension is requested. The extension fee should be charged to Deposit Account No. 02-4300; Order No. 032301.1181.

Respectfully submitted,  
SMITH, GAMBRELL & RUSSELL, LLP

By:

 By No: 48,119

Robert G. Weilacher, Reg. No. 20,531  
1850 M Street, N.W., Suite 800  
Washington, D.C. 20036  
Telephone: (202) 263-4300  
Facsimile: (202) 263-4329

Dated: December 17, 2002  
RGW/BLN